PENGARUH TINGKAT KELELAHAN TERHADAP KINEMATIK ATLET ROWING UKM DAYUNG UPI

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diajukan untuk memenuhi sebagian syarat memperoleh gelar Sarjana Olahraga
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Pengaruh Tingkat Kelelahan Terhadap Kinematik Atlet Rowing UKM Dayung UPI

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ABSTRAK

PENGARUH TINGKAT KELELAHAN TERHADAP KINEMATIK ATLET ROWING UKM DAYUNG UPI

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Dosen Pembimbing I : Agus Rusdiana, M.A., Ph.D.
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Kelelahan merupakan faktor yang dapat mempengaruhi kualitas gerak seorang atlet, salah satunya yaitu kinematik seorang atlet seperti perubahan pada postur, sudut sendi, dan kordinasi antar sendi ketika atlet tersebut mengalami kelelahan. Oleh karena itu tujuan dari penelitian ini adalah untuk mengetahui pengaruh tingkat kelelahan terhadap kinematik atlet rowing UKM Dayung UPI. 10 orang anggota Unit Kegiatan Mahasiswa Dayung UPI nomor rowing berpartisipasi dalam penelitian ini. Desain yang digunakan dalam penelitian ini adalah *One Group Pretest – Posttest Design.* Instrument pengambilan data menggunakan 1 handycams (Sony 32GB HDR-PJ540), 1 Accutrend Plus, *100-meter ergometer rowing test,* dan *Burpee (Squat Thrust).* Penelitian ini dianalisis dengan menggunakan *Paired Sample T-test,* dengan tingkat (Sig. 0.05). Hasil dari penelitian ini menunjukan bahwa terdapat perbedaan yang signifikan pada *Angle of Hip Joint at Finish Phase* (p= 0.005), *Angle of Knee Joint at Finish Phase* (p= 0.007), *Angular Velocity of Hip Joint at Drive Phase* (p= 0.006), dan *Angular Velocity of Knee Joint at Drive Phase* (p= 0.027) saat atlet rowing mengalami kelelahan. Hal ini menunjukan bahwa kelelahan dapat menjadi salah satu faktor yang mempengaruhi kinematik atlet rowing.

Kata kunci: rowing, kelelahan, kinematik, biomekanika olahraga

ABSTRACT

EFFECT OF FATIGUE LEVEL ON KINEMATICS OF ROWING ATHLETES IN UNIVERSITAS PENDIDIKAN INDONESIA

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Fatigue is a factor that can affect the quality of motion in athletes, one of which is the athlete's technique such as changes in posture, joint angles, and coordination between joints when the athlete experiences fatigue. Therefore, the purpose of this study was to determine the effect of fatigue level on the kinematics of UPI rowing athletes. 10 members of UPI rowing athletes participated in this study. The design used in this research was the One Group Pretest - Posttest Design. The data collection instrument used 1 handycams (Sony 32GB HDR-PJ540), 1 Accutrend Plus, 100-meter ergometer rowing test, and Burpee (Squat Thrust). This study was analyzed using the Paired Sample T-test, with the level (Sig. 0.05). The results of this study indicate that there is a significant difference in the Angle of Hip Joint at Finish Phase ($p = 0.005$), Angle of Knee Joint at Finish Phase ($p = 0.007$), Angular Velocity of Hip Joint at Drive Phase ($p = 0.006$), and Angular Velocity of Knee Joint at Drive Phase ($p = 0.027$) when rowing athletes experienced fatigue. This indicates that fatigue can be one factor affecting the rowing athlete's kinematics.

Keywords: rowing, fatigue, kinematics, sports biomechanics

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